

# CV

**Prof. Dr. Ir. SALAH H. ALJBOUR, PDEng.**

Professor of Chemical Engineering  
Department of Chemical Engineering  
Faculty of Engineering  
Mutah University

P.O Box 7, Mutah, 61410 Karak, Jordan

Office: +962-3-2372380/6114, Fax: +962-3-2375540, Cell phone: +962-79-028-1020

Email: [saljbour@yahoo.com](mailto:saljbour@yahoo.com), [saljbour@mutah.edu.jo](mailto:saljbour@mutah.edu.jo)



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## EDUCATION

**PhD in Chemical Engineering** (April 2007-March 2010)

Nagoya University, Nagoya, Japan

Thesis: Microreactors for Aqueous-Organic Multiphase Systems  
(Kinetics, Dynamics & Process Intensification Studies)

**MSc. in Chemical Engineering** (May 2002-May 2004)

University of Twente, Enschede, The Netherlands

Thesis: Gas Flow Regulation in Cigarette Lighters by means of Porous Media

**BSc. in Chemical Engineering** (Sep. 1997-Feb 2002)

Jordan University of Science & Technology, Irbid, Jordan

Graduation Thesis: Design of n-Olefin Production Plant

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## WORK EXPERIENCES

**Vice Dean**

Mutah University, College of Engineering, Karak, Jordan

(Oct 2023- till now)

**Full Professor**

Mutah University, College of Engineering, Karak, Jordan

Since Sep 2022

**Associate Professor**

Mutah University, College of Engineering, Karak, Jordan

(Sep 2017- Sep. 2022)

**Department Head**

Mutah University, College of Engineering, Karak, Jordan

(Sep. 2019 - Sep. 2020)

**Dean Assistant for Industry-Academia Collaboration**

Mutah University, College of Engineering, Karak, Jordan

(Jan. 2018 - Sep. 2018)

**Department Head**

Mutah University, College of Engineering, Karak, Jordan

(Sep. 2013 - Sep. 2018)

**Assistant Professor**

Mutah University, College of Engineering, Karak, Jordan

(March 2013-Sep 2017)

<b>Full-time Lecturer</b> Mutah University, College of Engineering, Karak, Jordan	<b>(Sep. 2011-March 2013)</b>
<b>Research Associate</b> National Institute for Environmental Studies, Tsukuba, Japan	<b>(April 2010-Sep. 2011)</b>
<b>Research Assistant</b> Nagoya University, Nagoya, Japan	<b>(April 2009-March 2010)</b>
<b>Teaching Assistant</b> Nagoya University, Nagoya, Japan	<b>(April 2007-March 2009)</b>
<b>Research Student</b> Nagoya University, Nagoya, Japan	<b>(April 2006-March 2007)</b>
<b>Researcher</b> The Higher Council for Science & Technology, Badia Research & Development Center, Safawi, Jordan	<b>(Feb. 2005-March 2006)</b>
<b>Research Assistant</b> University of Twente, The Netherlands	<b>(May 2002-May 2004)</b>
<b>Trainee</b> Arab Center for Pharmaceuticals & Chemicals, Sahab, Jordan	<b>(June 2001-August 2001)</b>

## **HONORS & AWARDS**

### **Japanese Government (MONBUKAGAKUSHO: MEXT) Scholarship**

to pursue a PhD study in Chemical Engineering (2006-2010)

### **University of Twente Appointment**

to pursue the MSc. degree in Chemical engineering (2002-2004)

### **Jordan Armed-Forces Scholarship (Royal Makruma)**

to pursue the BSc. degree in Chemical Engineering (1997-2002)

## **RESEARCH EXPERIENCE**

- Chemical Process Design and Development
- Catalysis
- Applications of Microreactors for Multiphase Systems
- Pyrolysis / Gasification
- Biofuels
- Engineering Management
- Circular Economy
- Safety Engineering and Management

## **RESEARCH & CONSULATION FUNDING (1 USD ~ 0.7 JD, 1 € ~ 0.83 JD)**

<b>51,000 JD</b>	<b>Scientific Research Funding,</b> "صندوق دعم البحث العلمي و الابتكار / وزارة التعليم العالي و البحث العلمي" "Bench Scale Facility for Biomass and Waste Gasification and Catalytic Gas Reforming".	<b>(2021- 2023)</b>
<b>53,000 JD</b>	<b>Scientific Research Funding,</b> "صندوق دعم البحث العلمي و الابتكار / وزارة التعليم العالي و البحث العلمي" "Ceramic Nanofibers-Reinforced Silica Aerogel as a Potential Reforming Catalyst for Biofuel Upgrading".	<b>(2020- 2022)</b>
<b>9, 500 JD</b>	<b>Deanship of Scientific Research MU,</b> "عمادة البحث العلمي / جامعة مؤتة" "Chemical and mineralogical characteristics of dry deposition in the surrounding of a Al-faisalieh-Sahab Region in Jordan "	<b>(2020- 2021)</b>
<b>20, 000 \$</b>	<b>WASH Innovation Hub,</b> "Integrated Management of Wastewater and Sludge in Decentralized Wastewater Treatment Plants"	<b>(2020- 2021)</b>
<b>1,000,000 €</b>	<b>GIZ- supported scientific research project</b> <b>Waste-to-positive-Energy Wto(P)E.</b> Coalition between German and Jordanian Universities, leaded by Rostock University, Germany.	<b>(2018-2020).</b>
<b>52,000 JD</b>	<b>Scientific Research Funding,</b> "صندوق دعم البحث العلمي / وزارة التعليم العالي و البحث العلمي" "Developing efficient, low cost, competitive, and environmental friendly Pilot Process for the Beneficiation of Phosphogypsum (PG) to be used in Local Jordanian Industries".	<b>(2014-2016)</b>
<b>30,000 JD</b>	<b>Consultation for "Decentralized Integrated Sludge Management (DISM) Project in Jordan" carried by Gesellschaft für Internationale Zusammenarbeit (GIZ),</b>	<b>(2016-2018)</b>

## **TEACHING EXPERIENCES**

### **Undergraduate courses:**

- Industrial Organic Chemistry (1 semester)
- Chemical Reaction Engineering (10 semesters)
- Chemical Reactor Design (10 semesters)
- Chemical Plant Design and Optimization (2 semesters)
- Equipments Design and Optimization (4 semesters)
- Applied Mathematics for Engineers (4 semesters)
- Design of Experiments (3 semesters)

Modeling and Simulation of Chemical Processes (6 semesters)  
Mass Transfer (10 semesters)  
Separation Processes (2 semesters)  
Momentum Transfer (9 semesters)  
Instrumental Analysis (1 semester)  
Numerical Analysis (7 semesters)  
Communication Skills for Engineers (3 semesters)  
Heat Transfer Laboratory (4 semesters)  
Thermodynamics Laboratory (3 semesters)  
Solid Particulate UOs Laboratory (5 semesters)  
Separation UOs Laboratory (5 semesters)  
Chem. Reaction Eng. Laboratory (7 semesters)  
Process Dynamics and Control (7 semesters)  
Water & Wastewater Treatment Engineering (1 semester)  
Chemical Process Safety (2 semesters)  
Optimization of Chemical Processes (3 semesters)

#### **Graduate courses:**

Advanced Transport Phenomena (4 semesters)  
Industrial Safety Management (4 semesters)  
Integrated Solid Waste Management (1 semester)  
Advanced Optimization of Chemical Processes (1 semester)

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## **SKILLS**

### **Languages**

Arabic (mother tongue)  
English (excellent)  
Japanese (intermediate level)

### **Instrumental Analysis**

GC, MS, HPLC, UV-VIS, AAS, FTIR

### **Software**

MS Office (Word, Excel, PowerPoint, Access, Visio), PhotoShop, Matlab, ChemSep, ASPEN plus, SigmaPlot, OriginPlot, SimaPro,

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## **PUBLICATIONS**

### **a) Journal Articles**

- 44 **Salah H. Aljbour**, Heba Al-Rowadb, and Nabeel A. Jarrah, "Sequential Extraction Procedure for Elemental Speciation in Jordanian Oil Shale Ash", *Solid Fuel Chemistry*, accepted for publication (2024).
- 43 Saif M. Al-Bayati, **Salah H. Aljbour**, Taha Al-Khamis, "Date Kernel Biochar: A Green Approach to Methylene Blue Removal from Polluted Water in Iraq", *Water Science*, accepted for publication (2024).
- 42 Rozalya Alhunity, Emad N. El Qada, **Salah H. Aljbour**, "Utilization of Jordanian Oil Shale Ash in Asphalt Mix: Environmental Impact Assessment", *Journal of Chemical Technology and Metallurgy*, accepted for publication (2023).
- 41 Husam AL-HAMAIEDEH, **Salah H. ALJBOUR**, Tayel EL-HASAN, Tuqa AL-MRAYAT, Ziad AL-GHAZAWI, "Pyrolysis of Domestic Sludge: Effect of Process Parameters on Biochar Calorific Value", *Civil and Environmental Engineering 2023*, Volume 19, Issue 2, 640-648.
- 40 Al-Thunibat, Ibraheem M., Adnan M. Al-Harashseh, **Salah H. Aljbour**, and Ali Shawabkeh. "Chemical and Mechanical Properties of Attarat (Jordan) Oil Shale Ash and Its Engineering Viable Options." *Solid Fuel Chemistry* 57, no. 2 (2023): 138-146.
- 39 Aljeradat, Rima A., **Salah H. Aljbour**, and Nabeel A. Jarrah. "Performance of chemically modified Tripoli in catalytic pyrolysis of date kernels." *Case Studies in Chemical and Environmental Engineering* 7 (2023): 100319.
- 38 Rozalya Alhunity, **Salah H Aljbour**, Emad El Qada, "Life Cycle Assessment of Asphalt Mix Containing Jordanian Oil Shale Ash", *Ecological Engineering & Environmental Technology*, 2023, Vol. 24, No. 2, pp. 79-86.
- 37 **Salah H Aljbour**, Kawamoto K. Cerium-Promoted Nickel/Alumina Catalyst for Producer Gas Reforming and Tar Conversion. *Journal of Ecological Engineering*, 2022; 23 (6) 58-66,
- 36 **Salah H Aljbour**, "Occupational accidents and work injuries in Jordan's economic sectors between 2010 and 2019", *Jordanian Journal of Engineering and Chemical Industries (JJEI)* (2022), Vo. 5, No. 2, pp. 32-45.
- 35 Al-Maaitah, Rawan A., and **Salah H. Aljbour**. "Impacts of quality management systems on occupational safety and health in industrial laboratories." *International Journal of Human Factors and Ergonomics* 9, no. 3 (2022): 282-310.
- 34 Al-Mrayat, Tuqa, Husam Al-Hamaiedeh, Tayel El-Hasan, **Salah H. Aljbour**, Ziad Al-Ghazawi, and Osama Mohawesh. "Pyrolysis of domestic sewage sludge: influence of operational conditions on the product yields using factorial design." *Heliyon* (2022): e09418.
- 33 Haitham Qaralleh, Khaled M Khleifat, Ma Hajleh, Muhamad O Al-Limoun, Rawan Alshawawreh, Mousa K Magharbeh, Talal Salem Al-Qaisi, Husni S Farah, Ta El-Hasan, Amjad Al-Tarawneh, **Salah H Aljbour**, Moath Alqaraleh, "Plant Growth-Promoting Rhizobium Nepotum Phenol Utilization: Characterization and Kinetics." *Journal of Hunan University Natural Sciences* 49, no. 4 (2022).
- 32 Rima A. Aljeradat, **Salah H. Aljbour**, Nabeel Jarrah, "Pyrolysis of date kernels using natural Jordanian Tripoli as a catalyst under different operational conditions", *Case Studies in Chemical*

*and Environmental Engineering*. **2022** May 2:100212.

- 31 **Salah H. Aljbour**, Katsuya Kawamoto, Tomohiko Tagawa, Hiroshi Yamada, "Kovar Tube as a Potential Catalyst for Conversion of Tar Produced from Biomass Gasification", *Chemistry and Chemical Technology*, **2022**,16, 454-460.
- 30 Mousa K. Magharbeh, Khaled M Khleifat, Mohammad A. Al-kafaween, Razan Saraireh, Moath Alqaraleh, Haitham Qaralleh, Amjad Al-Tarawneh, Muhamad O. Al-limoun, Tayel El-Hasan, Tayel Hujran, **Salah Aljbour**, Nabeel Jarrah, Malik Amonov, Hamid Ali Nagi Al-Jamal, "Biodegradation of Phenol by Bacillus simplex: Characterization and Kinetics Study", *Applied Environmental Biotechnology*, **2021** 6(2): 1-12
- 29 Rima A. Aljeradat, **Salah H. Aljbour**, Nabeel A. Jarrah, "Natural Minerals as Potential Catalysts for the Pyrolysis of Date Kernels: Effect of Catalysts on Products Yield and Bio-oil Quality", **2021**, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, (**2021**) 1-9.
- 28 Al-Athamin, Esra'A. Amin, Safwat Hemidat, Husam Al-Hamaiedeh, **Salah H. Aljbour**, Tayel El-Hasan, and Abdallah Nassour. "A techno-economic analysis of sustainable material recovery facilities: The case of Al-Karak solid waste sorting plant, Jordan." *Sustainability* 13, no. 23 (2021): 13043.
- 27 Maryam Al-Hajaya, **Salah H. Aljbour**, Husam Al-Hamaiedeh, Mahmoud Abuzaid, Tayel El-Hasan, Safwat Hemidat, Abdallah Nassour (2021), "Investigation of Energy Recovery from Municipal Solid Waste: A Case Study of Al-Karak City/Jordan", *Civil and Environmental Engineering*, 17, no. 2 (**2021**): 610-620.
- 26 **Salah H Aljbour**, Khaled M Khleifat, Amjad Al Tarawneh, Batool Asasfeh, Haitham Qaralleh, Tayel El-Hasan, Mousa K Magharbeh, Muhamad O Al-Limoun, "Growth Kinetics and Toxicity of Pseudomonas fredriksbergensis Grown on Phenol as Sole Carbon Source", *Journal of Ecological Engineering*, **2021**, 22 (10), 251-263.
- 25 **Salah H. Aljbour**, Husam Al-Hamaiedeh, Tayel El-Hasan, Bassam O. Hayek, Khalid Abu-Samhadaneh, Salam Al-Momany, Ayman Aburawaa, "Anaerobic Co-Digestion of Domestic Sewage Sludge with Food Waste: Incorporating Food Waste as a Co-Substrate Under Semi-Continuous Operation", *Journal of Ecological Engineering*, **2021**, 22 (7), 1-10.
- 24 **Salah H. Aljbour**, Tayel El-Hasan, Hussam Al-Hamiedeh, Bassam Hayek, Kalid Abu-Samhadaneh, "Anaerobic co-digestion of domestic sewage sludge and food waste for biogas production: A decentralized integrated management of sludge in Jordan", *Journal of Chemical Technology & Metallurgy*, **2021**, 56 (5), 1030-1038.
- 23 Ahmad R. Al-Nawaiseh, **Salah H. Aljbour**, Husam Al-Hamaiedeh, Tayel El-Hasan, Safwat Hemidat, Abdallah Nassour, "Composting of Organic Waste: Sustainable Alternative Solution for Solid Waste Management in Al-Karak Governorate/Jordan", *Jordan Journal for Civil Engineering*, **2021**, 15 (3), 363-377.
- 22 **Salah H ALJBOUR**, "Intensification of Shale Oil Extraction from Oil Shale - An Alternative Solution For Sustainable Energy in Jordan ", *Journal of Engineering Science and Technology*. **2020**, 14 (4), 1764-1775.

- 21 MA Aliedeh, **Salah H Aljbour**, AM Al-Harabsheh, K Al-Zboon, S Al-Harabsheh, "Implementing  $2^{(4-1)}$  Fractional factorial Design for Filling the Gabs in OVAT Sorption Studies of Nitrates Ions onto Jordanian Zeolitic Tuff", *Journal of Chemical Technology & Metallurgy*, **2020**, 56 (2), 331-341.
- 20 Adnan Al-harabsheh, Majed M. Ibrahim, Nureddine Elboughdri, Mohammad Al-Harabsheh, **Salah H. Aljbour** "Groundwater vulnerability mapping of Jordanian phosphate mining area based on phosphate concentration and GIS: Al-Abiad mine as a case study", *International Journal of Hydrology Science and Technology*, **2019**, 9 (6) 627-639.
- 19 **Salah H. Aljbour**, "Catalytic pyrolysis of olive cake and domestic waste for biofuel production", *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, **2018**, DOI: 10.1080/15567036.2018.1511649
- 18 **Salah H. Aljbour**, "Modeling of Corrosion Kinetics of Mild Steel in Hydrochloric Acid in the Presence and Absence of a Drug Inhibitor", *Portugaliae Electrochimica Acta*, **2016**, 34(6), pp. 407-416.
- 17 **Salah H. Aljbour**, Adnan Alharabsheh, Mohd Aliedeh, Kamel Alzboon, Sura Harabsheh, "Phosphate removal from aqueous solutions by using natural Jordanian zeolitic tuff", *Adsorption Science and Technology*, **2017**, 35(3-4), pp. 284-299, DOI: 10.1177/0263617416675176
- 16 **Salah H. Aljbour**, "Production of ceramics from waste glass and Jordanian oil shale ash", *Oil Shale*, **2016** Vol. 33, No. 2(3), pp. 260-271
- 15 **Salah H. Aljbour**, Sultan Tarawneh, Adnan Alharabsheh "Evaluation of the use of steelmaking slag as an aggregate in concrete mix: A factorial design approach" *Chemical Industry and Chemical Engineering Quarterly*, 23 (1) 113-119 (**2017**), DOI:10.2298/CICEQ151002016A
- 14 **Salah Aljbour**, Katsuya Kawamoto, "Bench-scale Gasification of Cedar Wood. Part II: Effect of Operational Conditions on Contaminant Release", *Chemosphere*, (**2013**), vol. 90, No. 4, pp. 1501-1507.
- 13 **Salah Aljbour**, Katsuya Kawamoto, "Bench-scale Gasification of Cedar Wood. Part I: Effect of Operational Conditions on Product Gas Characteristics", *Chemosphere*, (**2013**), vol. 90, No. 4, pp 1495-1500.
- 12 **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Mass Transfer Performance of a Capillary Microreactor during Ultrasound-assisted Phase Transfer Catalysis", *Journal of Chemical Engineering of Japan*, (**2010**), vol. 43, No. 5, pp. 429-434.
11. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Sequential Reaction-Separation System in a Microchannel Reactor for Liquid-Liquid Phase Transfer Catalysis", *Topics in Catalysis*, (**2010**), vol. 53, Nos. 7-10, pp. 694-699.
10. Mohammad Matouq, Omar Al-Ayed, Zaid Al-Anber, Mohammad Al-Shannag, Nasir Kloub, Tomohiko Tagawa, **Salah Aljbour**, "Wastewater Treatment Resulted from an Oil Shale Retorting at High Frequency Ultrasound Waves with a Chemical Elemental Analysis", *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, (**2010**), vol. 32, No. 20, pp.

1878-1884.

9. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Ultrasound-assisted phase transfer catalysis in a capillary microreactor", *Chemical Engineering & Processing: Process Intensification*, (2009), vol. 48, No. 6, pp. 1167-1172.
8. **Salah Aljbour**, Tomohiko Tagawa, Hiroshi Yamada, "Ultrasound-assisted capillary microreactor for aqueous-organic systems–Hydrodynamics Study", *Journal of Chemical Engineering of Japan*, (2009), vol. 42, No. 6, pp. 400-406.
7. **Salah Aljbour**, Tomohiko Tagawa, Hiroshi Yamada, "Ultrasound-assisted capillary microreactor for aqueous organic multiphase reactions", *Journal of Industrial & Engineering Chemistry*, (2009), vol. 15, No. 6, pp. 829-834.
6. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Simultaneous reaction-separation in a microchannel reactor with the aid of a guideline structure", *International Journal of Chemical & Biomolecular Engineering*, (2009), vol. 2, No. 4, pp. 220-223.
5. **Salah Aljbour**, Tomohiko Tagawa, Mohammad Matouq, Hiroshi Yamada, "Multiphase surfactant-assisted reaction separation system in a microchannel reactor", *Frontiers of Chemical Engineering in China*, (2009), vol. 3, No. 1, pp. 33-38.
4. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Rate-enhanced and green ethoxylation of p-chloronitrobenzene in a microchannel reactor", *Journal of Chemical Engineering of Japan*, (2009), vol (42), pp. s90-s95.
3. Mohammad Matouq, Zaid Al-Anber, Tomohiko Tagawa, **Salah Aljbour**, Hiroshi Yamada, "Investigating the Micro-Channel Flow Reactor Configuration on the Liquid Phase Synthesis of tert-amyl Methyl Ether Catalyzed by Sulfuric Acid", *Journal of Applied Sciences*, (2008), vol. 8, No. 4, pp. 601-607.
2. Mohammad Matouq, Zaid Al-Anber, Tomohiko Tagawa, **Salah Aljbour**, Mohammad Al-Shannaq, "Degradation of dissolved diazinon pesticide in water using the high frequency of ultrasound wave", *Ultrasonics Sonochemistry*, (2008), vol. 15, No. 5, pp. 869-874.
1. Tomohiko Tagawa, **Salah Aljbour**, Mohammad Matouq, Hiroshi Yamada, "Micro-channel reactor with guideline structure for organic aqueous binary system", *Chemical Engineering Science.*, (2007), vol. 62, No. 18-20, pp. 5123-5126.

## b) Conference Proceedings

9. Katsuya Kawamoto, **Salah Aljbour**, "Cedar Wood Gasification for Chemicals/Energy Generation - A Parametric Study", Proceedings of the Annual Conference of Japan Society of Material Cycles and Waste Management, 2011, Vol. 22, P1-FC-5.
8. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Microchannel Reactor with Guideline Structure for Organic-Aqueous-Organic Multiphase Systems", Proceedings of International Conference on Microreaction Technology (**IMRET 11**), March 8-10, 2010, Kyoto, Japan, pp. 250-251.



7. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Mass transfer performance of ultrasound-assisted phase transfer catalysis in a capillary microreactor", Proceedings of the 101 Annual meeting of the American Institute of Chemical Engineers (**2009 AIChE Annual Meeting**), Nashville, TN, USA, 2009, No. 570b.
6. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Surface-modified microchannel reactor for simultaneous reaction-separation system", Proceedings of the 12<sup>th</sup> Korea-Japan Symposium on Catalysis (**KJSC12**), Oct. 14-16, **2009**, Akita, Japan, GO 43, p. 121.
5. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Microreactors for Aqueous-Organic Multiphase Systems-Kinetics & Dynamics Studies", Proceedings of The 41<sup>st</sup> Autumn Meeting of the Society of Chemical Engineers of Japan (**41<sup>st</sup> SCEJ**), Sep. 16-18, **2009**, Higashi-Hiroshima, Japan, B 205, p. 251.
4. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Simultaneous Reaction-Separation in a Microchannel reactor with the aid of a guideline structure", Proceedings of the World Academy of Science, Engineering and Technology, International Conference of Chemical and Biomolecular Engineering (**ICCBE09**), May 27-29, **2009**, Tokyo, Japan, Vol. 41 (May 2009) pp. 980-983, ISSN 2070-3740.
3. **Salah Aljbour**, Hiroshi Yamada, Tomohiko Tagawa, "Rate-enhanced and Green Ethoxylation of p-chloronitrobenzene in a microchannel reactor", Proceedings of the 20<sup>th</sup> International Symposium on Chemical Reaction Engineering (**ISCRE 20**), Sep. 7-10, **2008**, Kyoto Japan, PB 12, pp. 606-607.
2. **Salah Aljbour**, Tomohiko Tagawa, Mohammad Matouq, Hiroshi Yamada, "Surfactant-assisted two phase flow for a reaction-separation system in a microchannel reactor", Proceedings of the 12<sup>th</sup> Asian Pacific Confederation of Chemical Engineers Congress (**12<sup>th</sup> APCChe Congress**), Aug. 4-6, **2008**, Dalian, China, vol. 5, pp. 156-159.
1. Tomohiko Tagawa, **Salah Aljbour**, Mohammad Matouq, Hiroshi Yamada, "Micro-channel reactor with guideline structure for organic aqueous binary system", Proceedings of the 19<sup>th</sup> International Symposium on Chemical Reaction Engineering (**ISCRE 19**), Sep. 7-10, **2006**, Potsdam/Berlin, Germany, pp. 329-330.

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## **PRESENTATIONS**

- H. Al-Hamaiedeh, T. El-Hasan, Salah Aljbour, "Integrated Management of Wastewater and Sludge in Decentralized Wastewater Treatment Plants", UNICEF/ WASH Innovation Hub at the Jordan University for Science and Technology, JORDAN, 2021.
- Rawan Al-Maaitah, Salah H. Aljbour, "Impact of Total Quality Management on Occupational Safety and Health in Laboratories", First Jordanian International Chemical Process Safety Virtual Conference, "Health, Safety, Environment, Social and Chemical Security", JORDAN, March (30-31), 2021.

- A. Al-Nawaiseh, Salah Aljbour, H. Al-Hamaiedeh, “Sustainable alternative solutions for clean organic waste in Al-Karak”, Waste to (Positive) Energy project (Wt(P)E), The 3<sup>rd</sup> Workshop at JUST University, JORDAN, 10 – 12 Dec. 2019.
  - M. Al-Hajaya, Salah Aljbour, H. Al-Hamaiedeh, “Measures of waste avoidance in municipalities of Jordan: case study of Karak”, Waste to (Positive) Energy project (Wt(P)E), The 3<sup>rd</sup> Workshop at JUST University, JORDAN, 10 – 12 Dec. 2019.
  - A. Al-Nawaiseh, Salah Aljbour, H. Al-Hamaiedeh, “Sustainable alternative solutions for clean organic waste in Al-Karak”, Waste to (Positive) Energy project (Wt(P)E), The 2<sup>nd</sup> Workshop at Mutah University, JORDAN, 28-30. Apr. 2019.
  - M. Al-Hajaya, Salah Aljbour, H. Al-Hamaiedeh, “Measures of waste avoidance in municipalities of Jordan: case study of Karak”, Waste to (Positive) Energy project (Wt(P)E), The 2<sup>nd</sup> Workshop at Mutah University, JORDAN, 28-30. Apr. 2019.
  - T. El-Hasan, H. Al-Hamaiedeh, Salah Aljbour et. al., “The results of implementation of treated wastewater and Bio-soilds generated from WWTP on the plantation of fodder at marginal areas at Al-Karak,, south Jordan”, Water Perspectives in Emerging countries: Water in Agricultural Practices: training the Trainers: Rio de Janeiro – BRAZIL, September (15-21), 2019.
  - Fatima A Abushattal, Salah H Aljbour, Husam D Al-Hamaiedeh, “Methane Gas Production through Co-digestion of Olive Mill Wastewater and Sewage Sludge”, The Eighth Jordan International Chemical Engineering Conference (JIChEC 2017), JORDAN, November 7-9, 2017.
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- Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Mass transfer performance of ultrasound-assisted phase transfer catalysis in a capillary microreactor”, the 101 Annual meeting of the American Institute of Chemical Engineers (2009 AIChE Annual Meeting), Nashville, TN, USA, 2009.
  - Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Surface-modified microchannel reactor for simultaneous reaction-separation system”, the 12th Korea-Japan Symposium on Catalysis (KJSC12), Oct. 14-16, 2009, Akita, Japan.
  - Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Microreactors for Aqueous-Organic Multiphase Systems – Kinetics & Dynamics Studies”, the 41st Autumn Meeting of the Society of Chemical Engineers of Japan (41st SCEJ), Sep. 16-18, 2009, Higashi-Hiroshima, Japan.
  - Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Simultaneous Reaction-Separation in a Microchannel reactor with the aid of a guideline structure”, the World Academy of Science, Engineering and Technology (WASET), International Conference of Chemical and Biomolecular Engineering (ICCBEO9), May 27-29, 2009, Tokyo, Japan.
  - Salah Aljbour, Tomohiko Tagawa, Mohammad Matouq, Hiroshi Yamada, “Surfactant-assisted two phase flow for a reaction-separation system in a microchannel

reactor”, the 12th Asian Pacific Confederation of Chemical Engineers Congress (12th APCCChE Congress), Aug. 4-6, 2008 Dalian China.

- Katsuya Kawamoto, Salah Aljbour, “Cedar Wood Gasification for Energy/Chemical Generation, A Parametric Study”, The 22nd annual Meeting of Japan Society of Material Cycles and Waste Management, Tokyo, Japan, 2011, 588-589, FC-5. (第 22 回廃棄物資源循環学会研究発表会, 第 22 回廃棄物資源循環学会研究発表会講演論文集 2011, 588-589).
- Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Microchannel Reactor with Guideline Structure for Organic-Aqueous-Organic Multiphase Systems”, International Conference on Microreaction Technology (IMRET 11), March 8-10, 2010, Kyoto, Japan.
- Salah Aljbour, Hiroshi Yamada, Tomohiko Tagawa, “Rate-enhanced and Green Ethoxylation of p-chloronitrobenzene in a microchannel reactor”, the 20th ISCRE, Sep. 7-10, 2008, Kyoto Japan.
- Tomohiko Tagawa, Salah Aljbour, Mohammad Matouq, Hiroshi Yamada, “Micro-channel reactor with guideline structure for organic aqueous binary system”, the 19th ISCRE, Sep. 7-10, 2006, Potsdam/Berlin Germany.

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## **MASTER THESIS SUPERVISION**

<b>Student</b>	<b>Department</b>	<b>Thesis title</b>	<b>Supervision</b>	<b>Year</b>
Fatima Abu-Shattal	Water and Environmental Engineering	Co-digestion of Olive Oil Wastewater Effluents and Sewage Sludge	Co-supervisor	2017
Mariam Al-Hajaya	Renewable Energy	Energy Recovery from Greater Karak Municipality Solid Waste: An Experimental Investigation	Co-supervisor	2020
Ahmad Al-Nawaiseh	Water and Environmental Engineering	Sustainable Alternative Solutions for Clean Organic Waste in Al-Karak Governorate	Co-supervisor	2020
Rima Aljeradat	Chemical Engineering	Catalytic Pyrolysis of Date Kerns By Using Jordanian Minerals as Catalysts	Co-supervisor	2020
Rawan Maaitah	Engineering Management	Effect of TQM on OHS in Chemical Laboratories	Supervisor	2020
Omer Al-Abadleh	Engineering Management	The application of Leen Six Sigma Tools to improve the performance of Natural Juice Production Plant	Supervisor	2020
Alaa Gababsheh	Chemical Engineering	Kinetics and Equilibrium Modeling of Gasification Processes	Co-supervisor	2021

Rozalya Alhunity	Engineering Management	Environmental Impact Assessment and Sustainability Metrics for the Utilizing of Oil Shale Ash in Asphalt Mix Production in Jordan	Supervisor	2021
Mohammad Aldaraba	Engineering Management	Business Continuity Management Assessment in JCMC	Supervisor	2021
Saja Al-Subaihi	Engineering Management	Economics and Strategic Implications for Extended Producer Responsibility from Producers Perspective	Supervisor	2021
Raed Al-Madaineh	Engineering Management	Life Cycle Assessment for Using Jordanian Oil Shale Ash in Concrete Production	Supervisor	2021
Heba Al-Rowad	Chemical Engineering	Extraction of valuable Metals from Jordanian Oil Shale	Supervisor	2022
Anfal Al-Tarawneh	Chemical Engineering	Catalytic Pyrolysis of Olive Cake Using Natural and Chemically-modified Oil Shale Ash as Catalysts	Supervisor	2023
Sajeda Al-Saraireh	Chemical Engineering	Utilization of Jordanian Tripoli for Tertiary Treatment of Wastewater	Supervisor	2023
Saif Al-Bayyati	Chemical Engineering	Production of low cost adsorbents from Iraq palm date kernels for Polluted Water Treatment	Co-Supervisor	2023
Eman Al-Rahaifeh	Chemical Engineering	Technical and Economic feasibility study of Bioplastic Production from Jordanian Resources	Co-Supervisor	2023
Batool Al-Qaisi	Water and Environmental Engineering	Tertiary Treatment Efficiency using Sand Filtration in the Removal of Selected Pharmaceutical Compounds from Secondary Treated Wastewater	Co-Supervisor	2024
Hisham Hijazeen	Water and Environmental Engineering	The Performance of packed Beds in the Removal of Selected Pharmaceutical Contamination from Secondary Treated Wastewater	Co-Supervisor	2024
Hamza Al-Rawashdeh	Water and Environmental Engineering	The removal of pharmaceutical compounds from secondary local domestic treated wastewater by using electrochemical treatment technique	Co-Supervisor	2024
Hasan	Water and	Pharmaceuticals removal from treated	Co-Supervisor	2024

Al-Zoubi	Environmental Engineering	domestic wastewater via Photo-Fenton techniques.		
Wasan Al-Saraireh	Chemical Engineering	Agricultural Wastewater Management and Treatment for Industrial Utilization	Supervisor	2024

## **OTHER CONTRIBUTIONS**

**1. Head of ABET Committee and Coordinator** in the department of Chemical Engineering.

**2. Internal/External Examiner for master theses** in the departments of Chemical Engineering, Environmental Engineering, Industrial Engineering, Mechanical Engineering at Mutah University, Jordan University of Science and Technology, Jordan-German University, and Al-Hussein Bin Talal University.

**3- Reviewer for several local and International Journals** in the field of Chemical Engineering, Chemistry, Environmental Engineering, Waste, Energy, Catalysis, Engineering Management.

**4. Supervisor for more than 25 undergraduate-graduation projects**

**5. Organizing committee member for the following conferences and symposiums:**

- The 8<sup>th</sup> Jordan International Chemical Engineering Conference (JIChEC 2017), Amman-Jordan, November 7-9, 2017.
- "المؤتمر الوطني: المهندسون الأردنيون: التنافسية وفرص العمل", جامعة مؤتة, الكرك- الأردن, 2018/7/23
- BAU- Second International Oil Shale Conference (BAU\_SIOSC), Salat-Jordan, October 9-11, 2018.

**6. Committee member in the Industry-Consultancy Committee – Jordan Engineers Association 2022-2024.**

## **ADDITIONAL INFORMATION**

Date of birth: Nov. 23<sup>rd</sup>, 1978

Nationality: Jordanian

Marital Status: married, with three daughters and two sons.

Hobbies & interests: Gardening, watching movies, Reading and Cooking

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## **REFERENCES**

Prof. Tomohiko Tagawa

National Institute of Technology

Toyota College

Eisei-cho 2-1

Toyota-shi, 471-8525, Japan

[tagawa@nuce.nagoya-u.ac.jp](mailto:tagawa@nuce.nagoya-u.ac.jp)

Prof. Fawzi Banat

(Department Chair & Professor)

Department of Chemical Engineering

Khalifa University,

P.O. Box: 127788,

Abu Dhabi, UAE

Email: [fawzi.banat@ku.ac.ae](mailto:fawzi.banat@ku.ac.ae)

Prof. Taha Alkhamis

(Professor and Former President of AHU University)

Department of Chemical Engineering

Mutah University,

Mutah, Karak, Jordan

61710, PO Box 7

Office: +962 795595518

Email: [alkhamis@mutah.edu.jo](mailto:alkhamis@mutah.edu.jo)